

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 9-11, 14 and 16-17 have been rejected under 35 U.S.C. § 102 as being anticipated by Long and Claims 12 and 13 have been rejected under 35 U.S.C. § 103 as being unpatentable over Long in view of Middlesworth. Claims 1-8 have been canceled without prejudice and thus, Claims 9-17 remain active.

Considering then the rejection of Claims 9-11, 14 and 16-17 under 35 U.S.C. § 102 as being anticipated by Long and the rejection of Claims 12 and 13 under 35 U.S.C. § 103 as being unpatentable over Long in view of Middlesworth, it is submitted that each of the independent claims in the present application patentably define over Long and Middlesworth. More particularly, Long relates a belt conveyor wherein a belt 25 is wound between a head section 20 and a tail section 22 which can come close to or go away from the head section 20, and the belt convey is provided with a belt take-up and storage unit 24 between both sections 20, 22. The unit 24 is composed of belt receiving means C (Figure 3A) provided on the head section 20 side and another belt receiving means D (Figure 3B) provided on the tail section 22 side. When the tail section 22 is brought close to the head section 20 (i.e., the distance between the both sections is shortened), the belt receiving means D is moved away from the belt receiving means C and takes up the slack of the belt. On the contrary, when the tail section 22 is brought away from the head section 20 (i.e., the distance between the both sections is made to be longer), the belt receiving means D is moved to come close to the belt receiving section C. That is, the approaching movement and the going-away movement of the tail section 21 relative to the head section 20 work to hold the tension of the belt 25 constant (or unchanged) through the going-away movement and the approaching movement of the belt receiving means D relative to the belt receiving means C. As shown in Figure 4A

of the reference, a winch 63 operates to move the belt receiving means D, and a tension cylinder 46 operates to hold the tension of the belt 25.

With respect to Middlesworth, as shown in Figure 1, a belt 29 is wound between a drive pulley 26 and an idle pulley 2 at both ends of the conveyer. When an extensible frame 12 is moved relative to an outer conveying frame 13a toward the drive pulley 26 to shorten the distance between the pulleys 26 and 28, a plurality of flights 35 (Figure 5) provided on the belt 29 wind the slack of the belt 29 by the action of a torsion spring 40 arranged in each of the flights 35, whereby the tension of the belt 29 is maintained adequately (cf. column 2, line 65 through column 3, line 45, and column 4, lines 11-35). Adjustable side walls 48 and a bottom wall 49 are able to be wound by spring-loaded reels 50 and 56 and adapt themselves to the approach/going-way movements of the extensible frame 12.

Kane merely shows a conventional transfer device for electronic component mounting boards.

With respect to the differences between the claimed invention and the above-noted references, and more particularly, with respect to Claim 9 of the present invention, Applicants note that Long completely differs from the invention claimed in Claim 9 insofar as:

- (i) Claim 9 requires a pair of guide rails 2a, 2b which are provided with guide surfaces 4 for guiding both side surfaces of a transferred article. In Long, on the contrary, transferred articles (minerals) are carried on the belt 25 (the portion indicated at 54h in Figures 3A and 3B) and are transferred toward the head section 20. In Long, is are not provided any pair of guide rails for guiding the transferred articles during the transfer operation. In fact, no guide is required for guiding the transferred articles in the conveyer of the reference which is used in mining field.

- (ii) Claim 9 also requires a stretching mechanism 10 provided at one end of each guide rail 2a, 2b and further requires a stretchable guide surface 26 provided at a facing surface of the stretching mechanism 10 and formed into a flat surface continuous and even with the guide surface regardless of the stretched position of the stretching mechanism 10.

To the contrary, Long is not provided with any guide rails and hence, does not teach the stretching mechanisms and the stretchable guide surfaces as defined in Claim 9. The Examiner states that Long teaches guide rails. However, these guide rails are members 30, 31 of frame means B (refer to Figure 5) which guide the belt receiving means C and D, and the members 30, 31 do not correspond to guide rails for guiding the transferred articles (minerals) which are carried on the uppermost belt portion 54h to be transferred.

With respect to independent Claim 17, such claim requires a pair of guide rails 2a, 2b and also claims an adjuster member 14 and a complementary member 22. Long fails to teach these components or elements. More particularly, Long neither teaches that the complementary member 22 is insertable into a space which is made between each guide rail 2a (or 2b) and the adjuster member 14, nor teaches the configuration that the complementary guide surface 26 of the complementary member 22 and the adjuster guide surface 18 of the adjuster member 14 cooperate to form a stretchable guide surface.

Claim 16 requires providing the pair of guide rails 2a, 2b, adjuster members 14 and complementary members 22 and also requires forming a stretchable guide surface which is a continuous and even flat surface, by joining the adjuster member 14 and the complementary member 22 at respective joint surfaces which are inclined relative to the transfer direction and the complementary direction. However, Long fails to teach these claimed requirements.

Claims 10-15 depend directly or indirectly from Claim 9. As discussed above, Long fails to teach the construction recited in Claim 9. Therefore, it is believed that these claims should be allowed for the reason that they depend from Claim 9.

Further, the following additional discussions are provided for each of these claims:

With respect to Claim 10, the Examiner states that Long teaches guide rails (30, 31), complementary members, adjuster members (C, D) and the like. However, these members referred to by the Examiner completely differ from those defined in Claim 10 in construction and operation. For example, the guide rails (30, 31) in Long are for guiding the belt receiving means C (Figure 3A) and the belt receiving means D (Figure 3B) and completely differ in construction and operation from the claimed guide rails which are provided with guide surfaces for guiding both side surfaces of a transferred article (refer to Claim 9, lines 1-3). Moreover, it is unclear which member or component in Long the Examiner intends to specify as complementary member.

As for Claim 11, the Examiner's rejection against this claim is not proper for the same reason as the aforementioned argument on Claim 10.

Regarding Claim 14, the Examiner states that a member indicated at 24 in Long corresponds to the feed means recited in Claim 14. However, numeral 24 in Long denotes the belt take-up and storage unit 24 and does not correspond to the feed means recited in Claim 14. Further, Long does not teach any means which moves the complementary member as defined in Claim 14.

As for Claims 12 and 13, as discussed above, Long completely fails to teach the features recited in Claim 9. Middlesworth does not disclose those elements which correspond to second to fifth rotational members 6c-6f recited in each of Claims 12 and 13. It instead only teaches rotational members which correspond to rotational members 6a and 6b provided

at both end portions of the transfer device shown in Figure 1 of the subject application.

Accordingly, it is believed the Examiner's findings of Claims 12 and 13 are improper.

In view of the foregoing, it is submitted that each of Claims 9-17 patentably define over the applied-noted references as well as the remaining references of record. Accordingly, an early and favorable Office Action is believed to be in order and the same is hereby earnestly solicited.

Respectfully submitted,

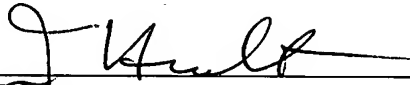
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